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**Robert C. Allen: Farm to Factory**

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## Soviet Development in World-Historical Perspective

The twentieth century was brief: it began with the Russian revolution of 1917 and ended with the dissolution of the Soviet Union on Christmas Day, 1991. Other events were important, of course—Hitler's rise to power, world war, the dissolution of the European empires, America's world hegemony—but these developments were powerfully influenced by the economic growth and political challenge of the USSR. With the end of communist rule and the dissolution of the Soviet Union, the world has entered a new era.

Death requires a postmortem, and the death of a country is no exception. The Soviet Union was a great social experiment with political, social, demographic, and economic dimensions. This book focuses on the economic issues—socialized ownership, investment strategy, agricultural organization, the growth of income, and consumption. What worked? What failed? And why? What lessons does Soviet history have to teach?

Discussion of Soviet economic performance has often been highly judgmental even when the underlying research has been dispassionately social-scientific. This was inevitable since political and intellectual life in the twentieth century was dominated by the contest between capitalism and socialism. Until Stalin's barbarities were exposed in the 1950s, the Soviet Union was the paradigm of socialism, and, even after that, there were few alternative examples of "actually existing socialism" to contemplate. Perhaps especially for the dreamers of a "better, truer" socialism, it is important to perform the autopsy on the last attempt.

But at the start of the twenty-first century, the failure of the Soviet Union has called into question any search for an alternative to capitalism. Most postmortems on the Soviet Union conclude that its economic model was hopelessly misguided. Rosefelde (1996, p. 980) was vehement and specific: "Stalin's economic programme thus must be judged a colossal failure. Administrative command planning proved inferior to market capitalism, growth was illusory, the nation's material welfare deteriorated during the 1930s and after some improvement lapsed into protracted stagnation." Harrison was more measured: "despite the Soviet great leap forward of 1928–37, . . . the USSR did not win the ex-

pected decisive victory in the economic race with the capitalist powers” (Davies, Harrison, and Wheatcroft 1994, p. 56). Malia (1994, p. 10) criticized the attempt to figure out what went wrong on the grounds that “the whole enterprise, quite simple, *was* wrong from the outset.”

Overall judgments like these are generalized from conclusions on the major issues in Soviet economic history. The complete case for failure makes the following claims:

1. The Soviet growth rate was not impressively high when seen in a world context (Khanin 1988, 1991). Certainly many capitalist countries have done as well, including the European periphery, Japan and, more recently, the East Asian Tigers. The crimes of Stalin brought no economic advantage.
2. Even before 1917, the Russian economy had taken off on a trajectory of modern economic growth that would have achieved a west European standard of living by the 1980s had the Bolshevik revolution not derailed the process (Gregory 1994; Mironov 2000). Whatever the apparent success of Soviet communism, it did less well than Russian capitalism might have done.
3. The increased output achieved under the Communists was limited to steel, machinery, and military equipment. Consumption was driven down in the 1930s to free resources for investment and armaments, and living standards grew at an abnormally low rate throughout the communist period. This is the expected result of an economy run by dictators whose aim was personal aggrandizement and world power rather than the welfare of the working class—a group whose interests would have been better served by a continuation of capitalism (Tucker 1977; Bergson 1961; Chapman 1963).
4. The collectivization of agriculture in the 1930s is a particularly vicious example of these tendencies. Herding the peasants into collectives, deporting the best farmers, and terrorizing the countryside did allow the regime to squeeze resources for investment out of agriculture, but the result was mass starvation and ruined farms (Nove and Morrison 1982; Conquest 1986; Fitzpatrick 1994; Viola 1996).
5. Soviet socialism was economically irrational because it was driven by ideology, bureaucratic infighting, and despotic caprice. Ignoring prices led to massive misallocation of resources that depressed performance, judging enterprises by output instead of profits meant bloated payrolls and excessive costs, allowing planners instead of consumers to direct the economy unnaturally tilted the balance of production from consumption to investment and the military (Kornai 1992; Hunter and Szyrmer 1992; Malia 1994).

6. The growth slowdown after 1970 showed the ultimate weakness of socialism: while it could function in a mediocre way to build the smokestack industries of the first industrial revolution, it was incapable of the sustained technological advance required for the postindustrial age. Therefore, the system collapsed (Berliner 1976; Goldman 1983; Kornai 1992).

These claims make a formidable indictment, but all of them are contestable. (1) Some commentators have noted that Soviet growth was exceptionally rapid (Nove 1990, p. 387; Gregory and Stuart 1986, p. 422). (2) Leading historians of Russia have been pessimistic about the growth prospects of the empire of the tsars (Gerschenkron 1965; Owen 1995). (3) Most commentators accept that consumption grew rapidly in the Soviet Union after World War II (Gregory and Stuart 1986, pp. 347–50), and published evidence already points to consumption growth between 1928 and 1940 (Hunter and Szyrmer 1992; Wheatcroft 1999; Nove 1990, p. 242), although the case is rarely made. (4) While collectivization has few defenders, not all commentators have dismissed Soviet agriculture as hopelessly inefficient (Johnson and Brooks 1983), and there is a powerful argument that it accelerated industrialization (Nove 1962). (5) Soviet policies had a coherence that is often overlooked (Erhlich 1960). (6) The growth slowdown in the 1970s and 1980s had many possible causes, some of which imply deep-seated failures of Soviet institutions (perhaps the incentives to adopt new technologies is an example), while others (like the diversion of research and development personnel to the military) are incidental. Although the usual judgment on the Soviet economy is negative, these divergent views show that the question is still a live one.

These issues define the agenda for this book. To explore them, the argument is developed along three axes. The first is careful reconstruction of the quantitative dimensions of Soviet growth. Here my work builds on that of the early pioneers of Soviet economic and demographic statistics—Lorrimer (1946), Bergson (1961), Chapman (1963), Hunter and Szyrmer (1992), Karcz (1957, 1967, 1979), Kaplan (1969), Moorsteen and Powell (1966), Nutter (1962), and their associates and students like Gregory (1982)—although my conclusions differ in important respects from theirs, most notably with regard to consumption.

The second axis is international comparisons. These are the only way to see Soviet performance in perspective. The Bolsheviks measured the USSR against the United States, and during the Cold War the Americans did the same. I compare the Soviet Union to the advanced, capitalist countries, too, but I emphasize comparisons with less developed countries as well. In many respects, the Soviet Union in the 1920s had more in common with Asia, the Middle East, and Latin America than it did

with Germany or the United States. These similarities underlay the attraction of the Soviet development model to leaders of Third World countries in the 1950s, 1960s, and 1970s: if the USSR could transform itself from an agrarian backwater into a superpower, maybe their country could do the same. Indeed, when compared to poor, Third World countries, Soviet performance was extremely good even taking account of the post-1970 growth slowdown. This record prompts one to look for policies and institutions that worked well rather than the usual cataloguing of reasons why the system was bound to fail. It also raises the question of whether there are positive lessons to learn from the Soviet experience.

The third axis is “what if?” (counterfactual) questions. These have always been central to an assessment of Soviet institutions and policies. The forced collectivization of agriculture is a case in point. It was not preordained: agrarian policy was heatedly debated in the 1920s. We can, therefore, ask how Soviet development would have differed had agriculture not been collectivized. This is Nove’s (1962) famous question: “Was Stalin Really Necessary?” An even harder question is how successful Russia would have been had the 1917 revolution never happened. As unhistorical—and difficult—as these questions may be, it is only by engaging them that we can establish the historical import of momentous decisions like collectivization. This book uses economic and computer models to simulate counterfactual development in a way that is as systematic as possible.

The study of counterfactuals is also important for the light it throws on the “Soviet development model.” What institutions worked and which failed? Could the model have been modified to make it more attractive and to raise living standards more rapidly? Should the negative assessment of Soviet performance be accepted without qualification, or were there aspects of economic organization that might be salvaged for the future? Questions like these require counterfactual investigation, and that is another reason it is pursued here.

#### SOVIET PERFORMANCE IN A WORLD-HISTORICAL CONTEXT

What was typical and what was unique in Soviet economic development? How well did the USSR perform compared to other countries in the twentieth century? The simplest indicator is gross domestic product (GDP) per head. Angus Maddison (1995) has pushed the data for the fifty-six largest economies<sup>1</sup> back to 1820.<sup>2</sup> These estimates establish four important points about the evolution of the world economy since 1820 and Russia’s place in it.

First, the dominant tendency has been income divergence; that is, the

TABLE 1.1  
GDP per Person around the World, 1820–1989 (1990 U.S. dollars)

	1820	1870	1900	1913	1928	1940	1950	1970	1989
USSR	751	1023	1218	1488	1370	2144	2874	5569	7078
W. Europe	1292	2110	3092	3704	4267	4901	5123	11080	16925
offshoots	1205	2440	4022	5237	6379	6813	9255	14372	21226
Mediterranean	1108	1436	1853	2263	2737	2866	2867	8273	13435
Periphery									
Northern Periphery	1000	1561	2221	2652	3139	3925	5244	10214	15866
Eastern Europe	748	1041	1345	1694	1947	1997	2145	4338	5916
Latin America	—	—	2443	3439	3975	3923	4683	6710	6566
Southern Core									
Latin America rest	723	725	899	1095	1332	1483	1883	3329	4886
China	523	523	652	688	779	778	614	1092	2649
Japan	704	741	1135	1334	1917	2765	1873	9448	17757
Taiwan & S Korea	—	—	828	909	1174	1548	888	2360	8827
S.E. Asia	—	—	790	977	1197	1183	941	1411	2644
South Asia	531	558	626	661	664	646	589	852	1237
Middle East	—	—	—	759	719	963	1038	1725	2919
Black Africa	—	—	—	440	527	559	537	810	799

Source: Computed from Maddison (1995).

countries that were rich in 1820 grew faster than the countries that were poor (Pritchett 1997). As a result, the gap between rich and poor countries has widened. Broadly speaking, there were two trajectories through the twentieth century: a country could become an advanced industrial economy or it could become an underdeveloped economy. A country's path depended, in large measure, on its starting point. Table 1.1 illustrates this pattern for broad groups of countries. In 1820, the rich countries were in western Europe (with an income of \$1292), the "offshoots," that is, the United States, Canada, Australia, and New Zealand (\$1205), the northern periphery of Ireland and Scandinavia (\$1000), and the Mediterranean periphery of Spain, Greece, and Portugal (\$1050). The rest of the world—including Russia—lagged behind with an income between \$525 and \$750. While there has been growth almost everywhere, the countries that were richest in 1820 grew fastest. Thus, in 1820, western Europe was two and a half times richer than South Asia; by 1989, the lead had grown to 15 times. Per capita GDP rose by a factor of 10 to 20 in the rich countries while the least successful regions—Latin America, South and Southeast Asia, and Black Africa—saw only a doubling or tripling of output per head. Divergence—not convergence—has been the dominant tendency since the industrial revolution.

Second, within the group of rich countries there has been some con-

vergence of income as the peripheral and—it should be emphasized—small countries on the fringe of western Europe caught up with the core. Convergence has lately received much attention from economists who were initially hopeful that it characterized the whole world. The simplest explanation is that convergence represents the diffusion of the industrial revolution. This is also the most optimistic interpretation since modern industry, in principle, can spread anywhere. While technological diffusion undoubtedly played a role, it is also clear that the growth of GDP per capita in countries like Ireland and Sweden owed much to massive emigration (O'Rourke and Williamson 1999), which cut the denominator in income per head. It was the small size of these countries that allowed big fractions of their populations to move to the offshoots. This source of convergence could not operate on a world scale.

Third, the division between the rich countries and the poor countries has been exceptionally stable. Very few countries have switched groups. Japan is remarkable for outstripping the poor countries and joining the rich. Possibly, Taiwan and South Korea, Japan's former colonies, are doing the same thing. In contrast, the southern cone of Latin America—Chile, Argentina, and Uruguay—has gone the other way. In the late nineteenth century, they were as rich as the advanced countries of Europe and were closely integrated into the world economy. Subsequent growth has been slow, and they have fallen into the company of the poor countries. Otherwise, the divisions have been stable.

Fourth, the Soviet Union grew rapidly in comparison to the other countries of the world. This stands out for the 1928–70 period, when the planning system was working well and also obtains—less dramatically—when comparisons are made over the whole 1928–89 period.

Figure 1.1 shows the relevant facts. The vertical axis shows the growth rate (the factor by which GDP per head grew from 1928 to 1970), and the horizontal axis shows 1928 income. The Organisation for Economic Co-operation and Development (OECD) points lie to the right of the graph in view of their higher 1928 incomes.<sup>3</sup> There is also a downward trend in the OECD points characteristic of income convergence (the poorer OECD countries in 1928 had a higher income growth factor). The trend line is the OECD “catch-up regression.” The non-OECD points are clustered in the lower left of the graph. These countries had low incomes in 1928 and low growth rates to 1970, so they failed to catch up with the leaders.

The Soviet Union (with a 1928 income of \$1370 and a growth factor of 4.1) was the non-OECD country that did the best in Figure 1.1. Its

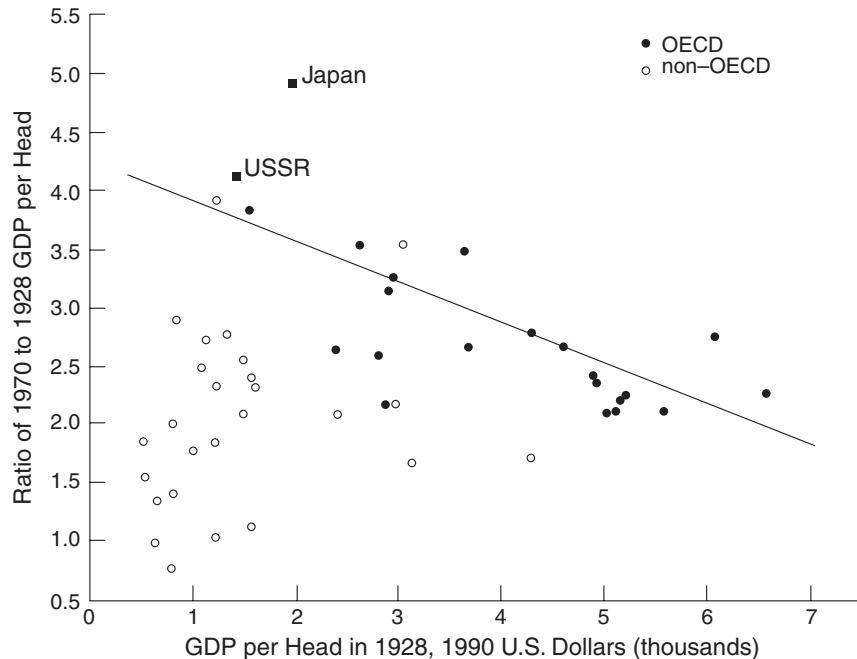


Fig. 1.1. Economic Growth, 1928–70. *Source:* Maddison (1995). Turkey is classified as a non-OECD country.

growth factor was also higher than that of all OECD countries except Japan. Soviet performance exceeded the OECD catch-up regression, which is a more stringent standard since its value is higher for poor countries than for rich. Figure 1.1 shows that the USSR performed exceptionally well over the 1928–70 period if it is classified as a less developed country and also outperforms the average OECD country even allowing for catch-up.

These conclusions hold, with some emendations, if the comparisons are extended to 1989, the year before the “reform” process began to cut GDP per head. The Soviet economy grew slowly in the 1970s and 1980s, so adding those years to the balance is unfavorable to the USSR. Nevertheless, the previous years of fast growth meant that the USSR’s overall record from 1928 to 1989 was still better than that of all major non-OECD countries with the exception of Taiwan and South Korea—the leaders of the East Asian miracle.

The long-run record is reviewed regionally in Figures 1.2–1.5. Figure 1.2 compares Soviet income per head to that of the rich countries of the



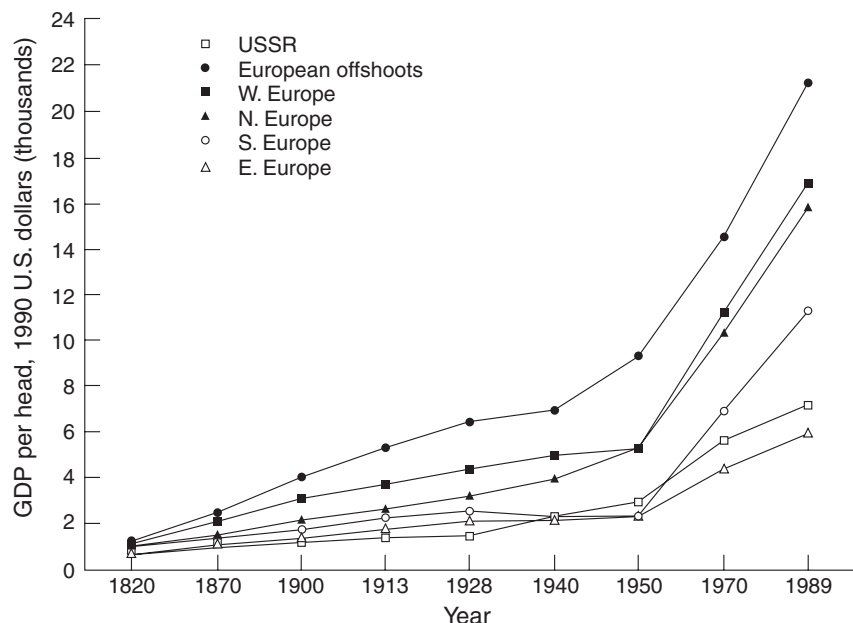


Fig. 1.2. USSR versus Europe and Its Offshoots. *Source:* Table 1.1.

West. Russia started from a lower base and did not catch up, although the Soviet Union grew faster than the West after 1928 and cut the gap that had opened up at the start of the planning period.

Figure 1.3 compares the USSR to East Asia. The Soviet Union does worse by this comparison than by any other, for Japan is the one country that had a mid-nineteenth-century income of less than \$750 and that caught up with the advanced countries of the West. Japan was unique. In recent decades, Taiwan and South Korea have grown very rapidly and have overtaken the Soviet Union, although they have not yet caught up with the West. Their recent success recapitulates their performance as Japanese colonies, when output rose from \$828 in 1900 to \$1548 in 1940. The East Asian miracle has long-standing roots that involve cultural and political factors that are not easily replicated; it is much more than a few simple policies that are geographically transportable.

The rest of the world is poor and has an unimpressive growth record. Figure 1.4 compares Soviet income levels to those in Latin America. The southern cone (Argentina, Chile, and Uruguay) had a European standard of living in the late nineteenth century, but has achieved only limited growth since. By 1989, these countries were surpassed by the USSR. The rest of Latin America started off poor in 1820 and grew at about

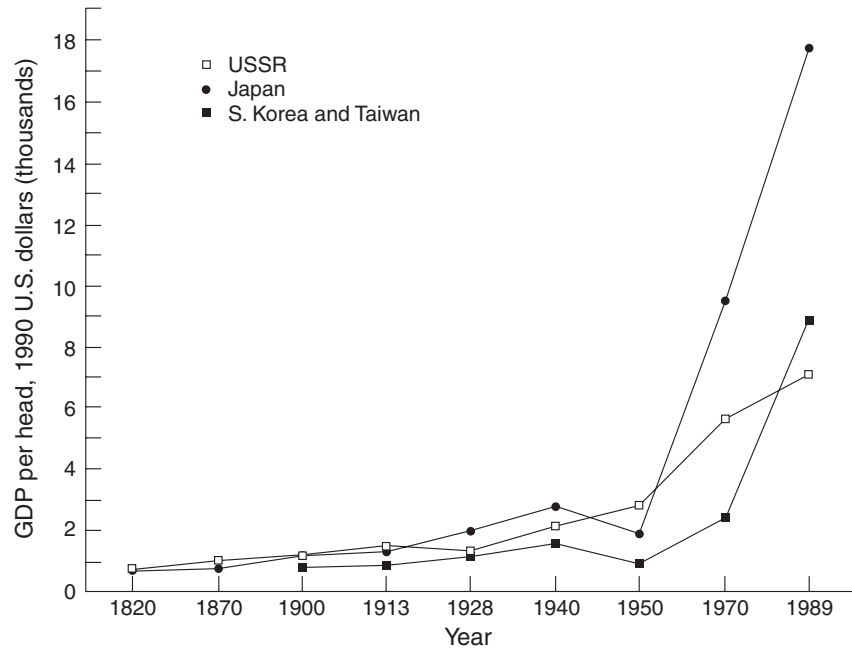


Fig. 1.3. USSR versus East Asia. *Source:* Table 1.1.

the same rate as Russia and the USSR to 1928. Thereafter the Soviet Union grew faster and realized a higher level of income in 1989.

Soviet performance is much more impressive when the rest of the world is the standard (Figure 1.5). In the late nineteenth century, South-east Asia (Indonesia, Thailand, and the Philippines) grew, like Russia, through integration into the world economy. Growth then slowed until very recent years. The Middle East (here represented by Turkey, Egypt, and Morocco) and China made little progress for much of the century but have also begun to grow in the past generation. GDP growth in South Asia (India, Pakistan, Bangladesh, and Burma) was more lethargic and almost negligible in Black Africa, which remains at a preindustrial income level. As Figure 1.5 makes clear, the Soviet Union grew rapidly since 1928 and had achieved an income level in 1989 several times that of any of these regions.

This point can be buttressed by comparing incomes in Soviet Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) and the north Caucasus republics (Armenia, Azerbaijan, and Georgia) with those in adjoining parts of the middle East and South Asia. These Soviet republics were always the poorest in the USSR and were in

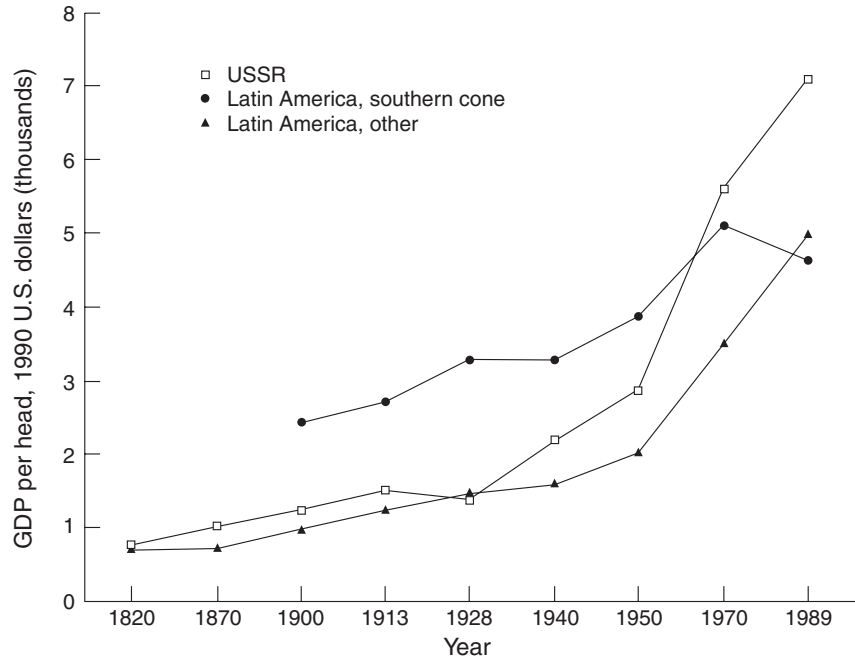


Fig. 1.4. USSR versus Latin America. *Source:* Table 1.1.

a pristinely premodern state in the 1920s that was no more advanced than neighboring regions outside the Soviet Union. In 1989, these republics were still the poorest of the USSR, but they had attained a per capita GDP of \$5257 per year.<sup>4</sup> This exceeded incomes in the most developed neighboring states—for example, Turkey with an average income of \$3989 or Iran with an income of \$3662—to say nothing of the poorer neighbors like Pakistan at \$1542 or war-torn Afghanistan, which Maddison guessed had an income of \$1000 per head. The Soviet populations in Central Asia and the north Caucuses experienced substantially more income growth than their counterparts in neighboring countries who started the twentieth century in similar circumstances.

As noted, however, the overall impressive record is an amalgam of two very different experiences. Leaving aside the war-torn 1940s, GDP grew at 5 to 6 percent per year from 1928 to 1970. The growth rate dropped to 3.7 percent in 1970–75, then to 2.6 percent in 1975–80, and finally reached 2.0 percent in 1980–85. The latter was effectively nil on a per capita basis. While the energy crisis and the Third World debt crisis hurt many countries in this period, the Soviet growth slowdown was unusually sharp. A major challenge of Soviet economic his-

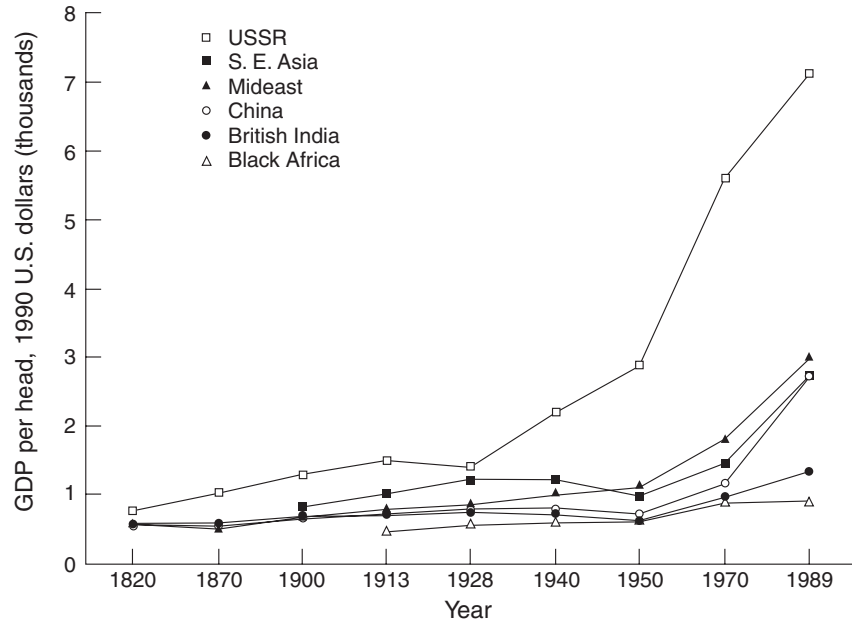


Fig. 1.5. USSR versus the Rest of the World. *Source:* Table 1.1.

tory is to explain how the rapid growth before 1970 turned into the slowdown of the past twenty years. Did the growth slowdown indicate a fundamental contradiction of the Soviet system, or was it due to external factors or policy errors that might have been avoided?

#### RUSSIA'S PLACE IN THE WORLD

Which is the right group for assessing Soviet performance: the rich capitalist countries of western Europe and its offshoots, or the poor countries of Asia, Latin America, and Africa? Russia's place in the world has been debated since the late Middle Ages. Little thought was given to the question before the late seventeenth century, when it was assumed that Russia straddled Europe and Asia with the line of division following one or another of the great rivers through what is now called European Russia. It was only after Peter the Great's drive to modernize the country that it was reconceptualized as a great empire—on the Western pattern—with its center in Europe and its colonies in Asia, and it was only in the eighteenth century that the continental boundary was pushed east to the Urals. With that relabeling, the Slavic regions were rebaptized as European. This division was hotly contested in the nineteenth century

by the Slavophiles, who wanted to distinguish Slavic Russia from Europe and designate Russia as a third great continent like Europe and Asia. Both the communist and postcommunist Westernizers have reaffirmed Peter the Great's cartography, but the important point is its artificiality. Looking at a map is not enough to decide whether Russia is European or Asian (Bassin 1991, 1993).

What is at issue is the inevitability (and desirability) of Russia's catching up with the West. The vision is Eurocentric: implicitly, it is assumed that industrialization is an essentially European phenomenon that all European countries will eventually experience. The process started in Britain in the eighteenth century, spread to northwestern Europe by 1850, and reached southern and eastern Europe by 1900. The Communists thought they were accelerating Russia's growth, while the anti-Communists thought that the 1917 revolution stalled the process, which would resume after 1991. No one expected much growth outside of Europe, so Russia's future depended on its classification. Both parties thought that Russia would become a replica—indeed, the Communists thought an improved version—of the West because both insisted that Russia was European.

The history of world incomes since 1800 provides some evidence in favor of this model. Within Europe, there has been convergence, and Europe has done better than most other regions. Japan's stellar performance is, of course, a challenge, that can be handled by identifying some "European" aspect of Japanese life—Western-style "feudalism" for Marxists or a "capitalist spirit" for Weberians—that sets it apart from the rest of the Third World.

While the classification of Russia can be endlessly debated, there are good reasons for seeing it as non-European rather than European. In the first place, objective indicators point in that direction.

The first is income in the early nineteenth century. As noted in the previous section, the capitalist core and its offshoots already had incomes of \$1200 per head and the Mediterranean and Scandinavian peripheries were \$1000 per head or more. Russia and the rest of the world had per capita incomes of \$750 or less.

The second is economic structure. In 1928, for instance, the rich capitalist countries had far more evolved economies. The share of the population in agriculture was about one-quarter in the western European core and about one-fifth in the offshoots. In the Mediterranean and northern peripheries—the backward parts of Europe soon to catch up with the leaders—the agricultural fraction was about one-half. Likewise, Japan had only half of its population in agriculture. These fractions represent a considerable reduction from the value of three-quarters, which is commonly observed in premodern economies.<sup>5</sup>

Outside of the OECD, few countries had made much progress. In most countries, about three-quarters of the population was agricultural. That was the proportion in the Russian Empire in 1913. Industrial collapse during the civil war (1918–21) pushed it up to 82 percent in 1926 (Davies 1990, p. 251). In keeping with their higher incomes at the time, the agricultural fraction was much lower in Argentina, Chile, Venezuela, and Czechoslovakia.

Third, the rich and poor countries have also had very different demographic regimes. Hajnal (1965) has famously argued for the distinction between European and non-European family structures. The patterns show up in censuses around 1900. In the European pattern, the average woman was in her late 20s when she first married and many women, indeed, never married. In the non-European pattern, virtually all women married, and they married young—mostly before the age of 20. This distinction is of tremendous importance. Beyond its cultural significance, fertility rates and population growth were greater where the non-European pattern predominated.

Where did Russia fit into this scheme? The geographical division was marked by a line from St. Petersburg to Trieste. North and west of that line, the European pattern was the norm, while the non-European pattern predominated to the south and east. Thus, with the exception of the Baltic and the Polish provinces, the Russian Empire was squarely in the non-European zone. It is important to emphasize that the Slavic heartland, as well as Central Asia and Siberia, were non-European by this criterion. So far as demography was concerned, the Slavophiles were right—Russia was not European.

The predominant historiographical tradition attributes Russia's high fertility to peculiarly Russian institutions, notably the peasant commune. These periodically redivided land among their members to equalize holdings. There was, consequently, no penalty for large families, and, indeed, many children served to expand a family's importance by securing more land at the next repartition (Gerschenkron 1965, p. 755; Pavlorsky 1930, p. 83; Violin 1970, p. 92; Heer 1968; Chojnacka 1976, pp. 210–11). Hoch (1994) has questioned this consensus, and the analysis in Chapter 6 shows that Russia's large families were the result of the same traditional, patriarchal values that have led to large families in many poor, non-European countries.

In the twentieth century, countries where the non-European pattern predominated had population explosions that have frustrated development efforts and contributed to the divergence in per capita income. The demographic patterns c. 1900 suggest that Russia's destiny was closer to India's than to Germany's.

## RUSSIAN COMPARISONS: LAW AND SOCIETY

A similar conclusion obtains if we shift from economic and demographic indicators to cultural, legal, and political considerations. Free market development requires private property, nonintrusive government, and—more generally—a broad social space that is free of government interference and in which private individuals can pursue their objectives in competitive and cooperative fashions. Successful capitalism is underpinned by a vigorous “civil society” (Seligman 1992; Putnam 1993). These were the characteristic institutions of Western states but not of tsarist Russia.

The civil society view differs from standard Marxist analysis, which attributes the ascendancy of the West to the rise of capitalism, which, in turn, is attributed, by this school, to the concentration of property ownership in the hands of a rich minority as the working majority loses its wealth. The civil society view also differs from neoliberal theories (e.g., North and Thomas 1973) that emphasize the importance of clearly defined property rights, irrespective of who owns them. The civil society view is more Tocquevillian: economic success is facilitated by widespread property ownership. Widespread property ownership promoted economic efficiency, particularly in agriculture, since greater output or lower costs translated directly into higher income for owner-occupying farmers and, thereby, gave them an incentive to innovate. Widespread property ownership also contributed to economic independence and allowed parents to invest in schooling and training for their children. Economic independence also promoted active citizenship, including participation in politics and voluntary associations. The result was more effective government and a vibrant “civil society.” A social sphere that allowed economic competition and voluntary cooperation independent of the state depended on widespread property ownership.

The West had it, but Russia did not. The differences between the two parts of Europe evolved over centuries. After the Norman conquest in 1066, England had the most centralized monarchy in Europe. In the twelfth century, Henry II effected a legal revolution that allowed free men to defend their title to freehold property in royal courts rather than in those of their feudal superiors. This was an important step in establishing secure private ownership of land. The high-handed behavior of the Angevin kings led to the confrontation between King John and the barons at Runnymede in 1215 when the king conceded the Magna Carta, which was an important first step in limiting the power of the Crown. Conflict between peasants, lords, and the monarch led to the extension of peasant proprietorship through copyholds and beneficial leases in the sixteenth and seventeenth centuries (Allen 1992). The civil

war and the Glorious Revolution secured the primacy of Parliament over the Crown. The widespread ownership of private property and the establishment of representative government (if not democracy) was the basis of civil society independent of the state.

On the Continent, widespread property ownership also evolved but through different channels. In late medieval France, for instance, the weakness of the king led to the consolidation of peasant title as well as the consolidation of noble property and to the creation of municipal, provincial, and ecclesiastical privileges that were immune to the pretensions of the later absolutist monarchs (Bloch 1931; Epstein 2000). In many parts of the Low Countries and in Germany, conflicts between the emperor, kings, nobles, and cities resulted in the securing of property by the upper classes and also by policies that protected peasant title (De Vries 1976; Thoen 1993). As in England, legal regimes and social patterns conducive to market-oriented development emerged.

Russian history did not replicate this pattern. By the eighteenth century, power was concentrated in the hands of the tsar, the nobility was dependent with little scope for self-directed action, and the peasantry was reduced to a serfdom little above slavery.<sup>6</sup> Liberals as well as Marxists regarded this social structure as a cause of underdevelopment.

The origins of serfdom run back to the fifteenth century. At the time, serfdom was disappearing in western Europe, as it was being imposed in eastern Europe. Russian serfdom can be seen as a response to a small population in a vast territory. About 10 million people lived in European Russia in 1400—one-twelfth of the population of the European part of the Russian Empire in 1913 (Bairoch et al. 1988, p. 297; McEvedy and Jones 1978, p. 82). In the Middle Ages, much of Russia was controlled by the Tatars as part of the Mongol Empire, and the duchy of Moscow controlled only a small territory around that city. In the fifteenth and sixteenth centuries, the grand prince, who adopted the title of tsar,<sup>7</sup> vastly expanded his territories at the expense first of the Tatars, and, then, of the Polish state that ruled western Russia and Ukraine. By 1800, the Russian Empire was nearing its maximum geographical extent in Europe, but its population was only 30 million—still less than one-quarter of its 1913 value (McEvedy and Jones 1978, p. 82).

With a very low population throughout the early modern period, Russia was a frontier society like nineteenth-century North America (Bassin 1993). Abundant land meant that new farms could be easily established. As a result, land commanded no rent; the nobility could extract little income from tenants, who would relocate if much was asked. Labor was the scarce factor of production, and the nobility could be supported only by preventing the peasants from fleeing. Once immobilized, they could be forced to pay rent and work the lords' land with-



out compensation. One feature of the settlement process worked in the lords' favor: as new arrivals, the peasants lacked a history of collective resistance to noble demands, and this made them easier to enserf (Brenner 1989). Serfdom (or slavery) was not the inevitable consequence of free land—slavery was the rule in the Southern United States but not the Northern states and peasant resistance had played a role in ending serfdom in western Europe after the Black Death<sup>8</sup>—but the tsar had the political power and will to tie the Russian peasants to the land so that they could be exploited by the nobility and the state (Domar 1970; Crummey 1987). The Ulozhnie of 1649 was the decree that accomplished that.<sup>9</sup>

The result was a society in which the “rule of law” was a tool by which the tsar and nobles exploited the peasants rather than an impartial umpire defining the rules of the game in which social equals pursued mutually advantageous relationships and exchanges. Yakovlev (1995, p. 5), for instance, claimed that “the basic cultural fact of Russian history is that in people’s consciousness, the law never was associated with moral truth.” It “was harsh and oppressive, unjust and cruel . . . the law of serfdom.” According to Owen (1998, pp. 24–25), “The various codes of laws issued from 1497 onward indicated the vigour with which Tsarist bureaucrats sought to regiment society by means of statutory compulsion and restriction. The law functioned as an administrative device not as a set of rules to be obeyed by state officials.” Russia had “rule *by* law” rather than “the rule *of* law” (Hedlund 2001, p. 222). The sphere for cooperation and voluntary exchange was, thereby, restricted, and business was inhibited by the meddling and interference of state officials. Since the seventeenth century an independent “civil society” has been the impossible dream of Russian liberals.

#### MISSING PREREQUISITES

Tsarist Russia lacked the social, legal, and economic institutions that theorists of economic growth have argued are prerequisites for capitalist development. Indeed, much of the rest of the world lacked—and still lacks—them as well. From the policy perspective, two responses are possible. One is to create the missing prerequisites. This is a favorite of development agencies. The second is to create substitutes for the missing prerequisites. This is an old idea to economic historians—especially historians of Russia—for Gerschenkron (1962) explored it a generation ago. At the time, entrepreneurship was regarded as a prerequisite for growth, and Russia was supposed to have been held back by a lack of the entrepreneurial spirit. Gerschenkron argued that state promotion was substituted for the missing entrepreneurs, so industrial growth pro-

ceeded in the late empire despite the lack of this prerequisite. Not much is heard about the entrepreneurial spirit today, but the same logic applies to other missing prerequisites. In reality, societies can invent around them, so development need not be impeded.

Russia's path to industrial society was based on the state's creating policies and institutions to substitute for the prerequisites that characterized Western economies. At the end of the seventeenth century, Russia was already falling behind the advanced countries of western Europe. Rising agricultural productivity and world empires were leading to extensive urbanization and manufacturing growth in the Netherlands and England. Russia did attempt to replicate this success in what has become the characteristic pattern. Instead of a broadly based, market-oriented process of development, Tsar Peter the Great (1682–1725) embarked on a state-directed program of importing Western technology. Hundreds of factories were established to produce mainly military products. While the great city of St. Petersburg was created, the modernization efforts had little impact on the structure of the economy, which remained overwhelmingly agricultural. In 1800, only 5 percent of the population lived in towns of 5000 people or more (Bairoch et al. 1988, p. 259). Indeed, the overall impact of Peter the Great may have been negative, for he extended serfdom and made it more rigorous rather than promoting a civil society capable of independent initiative.

With a weak private sector, economic development depended on state promotion and direction. Following defeat in the Crimean War, Tsar Alexander II abolished serfdom in the 1860s. In the late nineteenth century, the state promoted the construction of a vast railroad system and pursued an industrial policy to build the iron, coal, and engineering industries to supply its needs. Tariffs were used to encourage cotton spinning and weaving and later the cultivation of cotton plants east of the Caspian Sea. There was some growth, to be sure, but, I argue, the economic and demographic transformation was limited. The tsars did not lay the groundwork for rapid, capitalist development. In the absence of the communist revolution and the Five-Year Plans, Russia would have remained as backward as much of Latin America or, indeed, South Asia.

That fate was avoided by Stalin's economic institutions. They were a further installment of the use of state direction to cause growth in an economy that would have stagnated if left to its own devices. Most of this book is concerned with how Stalin's industrial revolution was accomplished, establishing its costs and benefits, and considering some alternative socialist strategies that would have avoided the catastrophes of Stalinism. Finally, the book explores the economic slowdown of the 1970s and 1980s that was one of the causes of the system's collapse.